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February 5, 2013

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: **GN Docket No. 13–5, Technology Transitions Policy Task Force**

Dear Ms. Dortch:

On October 10, 2012, Evans Griffiths & Hart, Inc. (EGH) commented[1] on the role of Public Switched Telephone Network (PSTN) databases in the industry's transition to IP telephony (the "October Comments"). In light of the Commission's establishment of the Technology Transitions Policy Task Force (the "Task Force") and the opening of Docket GN 13–5,[2] EGH offers these revised comments, emphasizing our suggested actions in support of this critical technology transition. Our October Comments remain relevant overall, as they provide background information about the PSTN's Line Information Databases (LIDBs), the subscriber data elements they contain, and discussion of how these data elements are used in the PSTN.

EGH is a supplier of Operations Support Systems (OSS) software to major US telecommunications service providers. We are very familiar with the elements of subscriber data—particularly, telephone number (TN) data—on which the PSTN relies for call completion, call blocking, calling name, and other services. As others have noted,[3] most IP transition planning to date has, quite properly, focused on the voice network itself, leaving the transition of many key subscriber data elements "unclear" at present.[4] Because these data elements support voice services that are relied upon by consumers, they clearly fall within the purview of the Task Force.

EGH encourages the Task Force to give appropriate consideration to the transition of TN-based subscriber data elements in PSTN databases for the reasons we outline in the attached comments.

Respectfully submitted,

/signed/

EVANS GRIFFITHS & HART, INC.
Lauren M. Crocker
President

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1 Evans Griffiths & Hart, Inc., *Comments on PSTN Databases and the Transition to IP Telephony,* October 2012; http://apps.fcc.gov/ecfs/document/view?id=7022032292

2 DA 13-20, January 10, 2013; http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0110/DA-13-20A1.pdf

3 Shockey Consulting, *ex parte* of January 16, 2013; http://apps.fcc.gov/ecfs/document/view?id=7022105976

4 *id.,* at 4.

Subscriber Data Elements and the Transition to IP Telephony

February 2013

Today's TDM Public Switched Telephone Network (PSTN) relies on a number of databases containing subscriber data elements keyed to the subscriber's telephone number (TN). While some of these data elements are used in addressing and routing calls, others support a range of PSTN services, including Calling Name (CNAM), call blocking, line number screening, determination of TN ownership, and PIN validation for TN-based calling cards. PSTN databases also maintain subscriber data elements such as billing name and address, service start date, and ZIP+4 that have additional, and sometimes non-telecom, uses.

The Technology Transitions Policy Task Force (the "Task Force") established by the FCC is responsible for coordinating "the Commission's efforts on…resiliency of 21st century communications networks…and consumer protection with a particular focus on voice services."[5] To fulfill this mandate, EGH anticipates that the Task Force will examine the full range of voice services provided by the PSTN and advise the Commission on how, or in some cases *whether*, these services will transition to IP.

The Task Force must, therefore, take note of and understand the subscriber data elements in the PSTN's existing databases and how they will be impacted by the transition. This assessment should include:

- How the various TN-based subscriber data elements support voice services today;
- Which data elements have a natural counterpart in the technology of VoIP signaling;
- Which data elements may be retired following the transition (because the services they support will not be continued in the all-IP environment);
- Which data elements pertain to services unrelated to call completion that can be left to service providers to consider in their own transition planning; and

[5] http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db1210/DOC-317837A1.pdf

- Which data elements must be specifically cared for in the transition because they support voice services demanded by consumers or required by public policy (at the state or Federal level), but which do not have direct counterparts in VoIP implementations today.

Many of the subscriber data elements that fall into this last category are to be found in the PSTN's Line Information Database (LIDB), the subject of our October comments.[6] In those comments we provided:

- An overview of LIDB as it exists today,
- A description of the TN-based subscriber data elements contained in LIDB and how they are used in the PSTN,
- A discussion of contemporary practices and concerns about how LIDB data is used, the LIDB operators' business model for LIDB services, use of LIDB data in revenue-generating non-PSTN applications, and the importance of CNAM, a key application of LIDB data in the PSTN today.

In our comments we also provided a more detailed look at specific LIDB data elements that are important to today's voice services but may not have ready equivalents in VoIP signaling.[7] These include:

- *TN ownership;*
- Authoritative *Calling Name* (CNAM);
- *Bill Number Screening,* for collect calling and calls billed to third parties*;*
- *Originating Line Number Screening* for prison lines (already the subject of another FCC proceeding) and hotel rooms, as well as for optional services billed to the originating line;
- *Service and Equipment Indicator,* used to determine treatment of calls originated by the TN;
- *ZIP+4*, used in "311" information services routing;
- *Line-based calling card PINs,* (to the extent these are retained in the all-IP network); and
- *PIC* and *LPIC,* interexchange carrier designations (to the extent these are retained in the all-IP network).

These data elements merit attention in the transition to IP-based services because they are used today to provide consumer-oriented voice services. Unless they are provided for in the VoIP domain in some way, it may be difficult to continue these services.

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[6] Evans Griffiths & Hart, Inc., *Comments on PSTN Databases and the Transition to IP Telephony,* October 2012; http://apps.fcc.gov/ecfs/document/view?id=7022032292

[7] *id.*, p. 7: "What LIDB services must be cared for in the PSTN transition?"

EGH encourages the Task Force to examine these data elements. As we noted in our October comments,[8] timely planning is important because:

- Providing services supported by these data elements across the transition to the all-IP network may raise regulatory questions, at both the federal and state level, that will require time to address and resolve;
- Service providers and LIDB operators, as well as the Task Force, will need time to assess how the data elements stored in PSTN LIDBs are used today, and how they should be handled in the all-IP, post-LIDB environment;
- Careful transition planning with regard to the *storage* and *lookup* of these data elements in the all-IP environment is needed to minimize any impact on voice services on which consumers rely.

Fortunately, service providers have TN data provisioning processes in place today, associated with LIDB and other PSTN databases, that can be leveraged to facilitate a smooth transition to the all-IP environment. As we noted in our October comments,[9] existing administrative systems associated with the PSTN's LIDBs can be utilized both during and after the transition to support provisioning of TN data in both LIDB and in post-LIDB all-IP network databases.

EGH recommends that the Task Force involve subject matter experts in the service provider and supplier communities familiar with the handling of these subscriber data elements in the transition planning process, to ensure the data elements maintained in these critical "network of record" databases are appropriately taken into account.

For additional information, please contact:

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[8] *id.*, p. 9: "Conclusions and Recommendations"
[9] *id.*